

LANL Prioritizes Plutonium "Pit" Bomb Core Production Over Safety

FOR IMMEDIATE RELEASE, November 6, 2025

Contact: Jay Coghlan, 505.989.7342, c. 505.470.3154, jay[at]nukewatch.org Scott Kovac, 505.316.4148, scott[at]nukewatch.org

Santa Fe, NM – The independent Defense Nuclear Facilities Safety Board recently released its Review of the Los Alamos Plutonium Facility Documented Safety Analysis. It concluded that:

"While LANL facility personnel continue to make important upgrades to the Plutonium Facility's safety systems, many of those projects have encountered delays due to inconsistent funding and other reasons. DOE and LANL should consider prioritizing safety-related infrastructure projects to ensure that the Plutonium Facility safety strategy adequately protects the public, as the facility takes on new and expansive national security missions." (Page 24)

In early October 2024, the Department of Energy's semi-autonomous National Nuclear Security Administration (NNSA) announced with great fanfare that the Los Alamos Lab had produced its first "diamond stamped" plutonium pit for the nuclear weapons stockpile. Tens of billions of taxpayers' dollars have been sunk into LANL's long delayed and over budget pit production program. Given no further announcements, it is not currently known whether or not the Lab is meeting its congressionally required production goals. Endemic nuclear safety problems have long been an intractable issue, at one point even forcing a three-year halt to plutonium operations at LANL's Plutonium Facility-4 ("PF-4").

In its recent Review, the Safety Board reported:

"The [2009] Plutonium Facility safety basis described very large potential [radioactive] dose consequences to the public following seismic events.... DOE committed to upgrade and seismically qualify the ventilation system, with a particular focus on a specific ventilation subsystem..."

"As the only facility in the DOE complex that can process large quantities of plutonium in many forms, [PF-4] represents a unique capability for the nation's nuclear deterrent. The Board has long advocated for the use of safety-related active confinement systems in nuclear facilities for the purposes of confining radioactive materials...Passive confinement systems are not necessarily capable of containing hazardous materials with confidence because they allow a quantity of unfiltered air contaminated with radioactive material to be released from an operating nuclear facility following certain accident scenarios. Safety related active confinement ventilation systems will continue to function during an accident, thereby ensuring that radioactive material is captured by filters before it can be released into the environment... (Page 2, bolded emphases added)

The Safety Board referred to DOE Order 420.1C, *Facility Safety*, which has a clear requirement that:

"Hazard category 1, 2, and 3 nuclear facilities... must have the means to confine the uncontained radioactive materials to minimize their potential release in facility effluents

during normal operations and during and following accidents, up to and including design basis accidents... An active confinement ventilation system [is] the preferred design approach for nuclear facilities with potential for radiological release. Alternate confinement approaches may be acceptable if a technical evaluation demonstrates that the alternate confinement approach results in very high assurance of the confinement of radioactive materials." (Page 2, bolded emphases added; PF-4 is a Hazard Category 2 nuclear facility)

Plutonium pit production at LANL is slated for a 15% increase to \$1.7 billion in FY 2026. But in a clear example of how the NNSA prioritizes nuclear weapons production over safety, the DNFSB reported:

The active confinement safety system "remained the planned safety strategy for the Plutonium Facility for many years... However, in a March 2022 letter to the Board, the NNSA Administrator stated that the planned strategy would shift away from safety class active confinement... A safety class would require substantial facility upgrades far in excess to those that are currently planned... facility personnel also noted that some projects [for alternate confinement approaches] have been paused or delayed due to funding issues..." (Pages 3 and 21, bolded emphases added)

Instead of a technical evaluation demonstrating that "the alternate confinement approach results in very high assurance of the confinement of radioactive materials," the Board concluded:

"Predicting the amount of release under passive confinement conditions can be quite complex. Fire or explosions could add energy to the facility's atmosphere and introduce a motive force that could carry hazardous materials through an exhaust path... Therefore, determination of the amount of radioactive material that could escape the facility becomes very complex and uncertain." (Page 8, bolded emphases added)

In sum, DOE reneged on its commitment to retrofit a safety class confinement system at PF-4, even as it ramps up plutonium pit production. At the same time, LANL has not demonstrated that its "alternate confinement approach results in very high assurance of the confinement of radioactive materials" in the event of an accident or earthquake.

This also contradicts the NNSA's position that potential radioactive doses are vanishingly small. For example, the agency claims that the "Most Exposed Individual" of the public would have only a one in a million chance of developing a "Latent Cancer Fatality" from an accidental fire in gloveboxes at PF-4, which commonly process molten, pyrophoric plutonium. (Draft LANL Site-Wide Environmental Impact Statement, January 2025, Page D-23)

Moreover, pit production that involves plutonium-239 is not the only nuclear safety issue. PF-4 also processes plutonium-238, a dangerous gamma emitter, as a heat source for radioisotope thermoelectric generators (AKA nuclear batteries). The Safety Board's Review noted:

While newly installed gloveboxes meet seismic requirements, and facility modifications associated with the pit production mission prioritize upgrades for some gloveboxes, others have known seismic vulnerabilities and will not be able to perform their credited post-seismic function. Many of these deficient gloveboxes are associated with processing heat source plutonium, a high-hazard material which accounts for much of the facility's overall safety risk... Upgrading glovebox support stands is important to return the facility to a

safety posture more reliant on credited engineered features..." (Pages 22-23, bolded emphases added)

Nuclear safety issues will always be inherent to plutonium pit production, yet new pit production itself is simply not necessary. No currently planned production is to maintain the safety and reliability of the existing nuclear weapons stockpile. Instead, it is all for new-design nuclear weapons, which could prompt the U.S. to resume full-scale testing, as Trump has recently ordered. Pit production is the NNSA's most expensive program ever, but it has no credible cost estimates. Independent experts have concluded that pits last at least a century (their average age now is ~43) and there are at least 15,000 existing pits already stored at the Pantex Plant near Amarillo, TX.

Moreover, the future of the independent Defense Nuclear Facilities Safety Board is in doubt, without whom the DOE's chronic nuclear safety record would not be publicly known. The DNFSB's five-member Board recently lost its quorum because of term limits. The Board desperately needs nominations from the Trump Administration, which so far has not happened either by design or neglect.

Jay Coghlan, Director of Nuclear Watch New Mexico, commented, "We are facing a perfect storm of expanding plutonium pit production and diminishing oversight by the Safety Board. LANL's expanding nuclear weapons programs are sucking money from the Lab's other programs that are truly needed, such as nonproliferation, cleanup and renewable energy research (which is being completely eliminated). NNSA's prioritization of plutonium pit production for the new nuclear arms race and the erosion of nuclear safety could have disastrous results for northern New Mexico."

###

The DNFSB's *Review of the Los Alamos Plutonium Facility Documented Safety* Analysis is available at https://www.dnfsb.gov/sites/default/files/2025-10/Review%20of%20the%20Los%20Alamos%20Plutonium%20Facility%20Documented%20Safety%20Analysis%20%5B2026-100-001%5D.pdf

This press release is available online at https://nukewatch.org/lanl-prioritizes-plutonium-pit-bomb-core-production-over-safety